

Loss Mitigation Grant Program Wind Resistive Device (WRD) Product Evaluation

The product as described herein has been evaluated by the Department of Commerce and Consumer Affairs (DCCA) for compliance with the technical requirements for wind resistive devices installed in single or multi-family residential dwellings. Installation costs of approved products are partially reimbursable under the provisions of the Loss Mitigation Grant Program. The results of the product evaluation are presented in the following report.

1.0 Product Information

1.1 Product Names:

Simpson Strong-Tie HPTZ Hawaii Plantation Tie

1.2 Description:

HPTZ is a hurricane uplift clip manufactured specifically for Hawaiian single wall construction. The clip attaches to the rafter or truss and to a single top plate wall with redwood siding and block frieze board.

1.3 Category:

Submitted for evaluation as a WRD option 1- Roof to wall uplift restraint

1.4 Submitted By:

- a. Manufacturer:
Simpson Strong-Tie Company, Inc.
260 N. Palm St.
Brea, CA 92821-2870
Phone: (800) 999-5099

- b. Local Sales Representative:
Tim Waite
Phone: (808) 479-1216
Fax: (808) 941-9079

2.0 Product Evaluation

2.1 Uplift Resistance:

- a. The HPTZ connectors were tested in accordance with ICC AC13. Load is applied at a rate of 0.100 in/min until 1/8" of deflection is reached and the load recorded. The results are summarized in Table 1.

Table 1. Uplift capacity test results

No. of Connectors	Allowable Uplift Load	Required Capacity for WRD Approval	Approved
1	405 lb.	400 lb.	Yes

2.2 Installation:

HPTZ is to be installed in accordance with the WRD technical specifications, the manufacturer's engineering drawings and this report. The manufactures installation instructions shall be strictly adhered to.

2.3 Substantiating Data:

- a. Test Report on uplift capacity of HPTZ using wood screws, prepared by Testing Engineers, Inc., Test Report No. O824 dated February 19, 2008, Signed and Sealed by Peter M. Grossman, C.E. (CA License No. C053270)

3.0 Findings

Evaluation in review of the submitted data indicates that the Simpson HPTZ Hawaii Plantation Tie as described in this report does conform to the requirements of the loss mitigation grant program and is an acceptable WRD to provide additional uplift capacity to the roof trusses or rafters of single wall structures.

The HPTZ clip may be approved for use on rafters or trusses spaced at no more than 24 inches o.c. and having a span of 24 feet or less, or when the product of the truss spacing (ft) and truss span (ft) is no more than 48 ft². The uplift capacity of a single HPTZ clips is insufficient for WRD approval when the product of the truss spacing (ft) and truss span (ft) exceeds 48 ft².

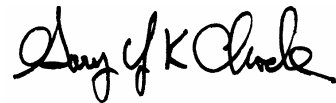
No anchorage details or test results have been provided for masonry wall construction. Additional data must be submitted for WRD approved use on this construction type.

All fasteners shall be corrosion resistant, either Type 316 stainless steel or galvanized steel with a zinc coating thickness equal to or greater than 1.5 ounces of zinc per square foot of surface area per ASTM A653. Stainless steel clips or straps shall be installed with stainless steel nails or screws. Galvanized clips or straps shall be installed with ASTM A153 galvanized nails or hex drive screws.

May 14, 2008

3.1 Limitations:

- a. The HPTZ clip qualifies as an approved WRD product for use on single wall construction only. The HPTZ is not approved as a WRD device for masonry or double wall construction.
- b. Spacing of trusses or rafters must be no more than 24 inches o.c. and the span may be no more than 24 feet, or the product of the truss spacing (ft) and truss span (ft) may not exceed 48 ft².
- c. All clips must be corrosion resistant, either stainless steel or galvanized steel with a zinc coating.
- d. HPTZ's must be installed in accordance with the manufactures installation instructions and the WRD Technical Specifications.



Gary Y. K. Chock, S.E.
Product Examiner
May 14, 2008